

REMARKS

Claims 1, 3-7 and 10-20 are pending in the present application. Claims 1, 7, 10 and 20 have been amended and claims 2, 8 and 9 have been canceled without prejudice to or disclaimer of the subject matter contained therein. Claims 1, 7, 10, 11 and 18 are independent. Reconsideration of this application, as amended, is respectfully requested.

Information Disclosure Statement

In the Examiner's Office Action, the Examiner indicates that the Information Disclosure Statement (IDS) dated August 27, 2001 has not been considered, since copies of the EP 0756414A2 and EP 0689157A2 documents were not provided. Applicants submit that copies of these documents were provided in parent Application No. 09/272,557, and these references were considered by the responsible Examiner in this previous application as well as intervening parent Application No. 09/729,352. In view of this, as mentioned in the IDS dated August 27, 2001, it is not necessary for Applicants to provide copies of these references. However, for the convenience of the Examiner, copies of these references are attached hereto.

In view of the above, it is requested that the Examiner initial the PTO-1449 form attached to the August 27, 2001 IDS and forward the initialed copy with the next Official Communication to indicate consideration of the references listed thereon.

Rejection Under 35 U.S.C. § 112

Claims 10 and 20 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention. This rejection is respectfully traversed.

As the Examiner will note, claims 10 and 20 have been amended to correct the deficiencies pointed out by the Examiner. Specifically, claim 10 has been amended to recite "at least one other scanner that can process the scan job in accordance with the scan job settings of the scan job." In addition, claim 20 has been amended to recite "[t]he scanner."

In view of the above, Applicants respectfully submit that claims 10 and 20 are definite and clear. Accordingly, reconsideration and withdrawal of the Examiner's rejection under 35 U.S.C. § 112, second paragraph, are respectfully requested.

Rejection Under 35 U.S.C. § 102

Claims 1-9, 11-15 and 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lobiondo (U.S. Patent No. 5,287,194). Claims 10 and 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lobiondo in view of Ohkubo (U.S. Patent No. 5,123,063). Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lobiondo in view of MacKay (U.S. Patent No. 5,718,520). These rejections are respectfully traversed.

At the outset, it is respectfully pointed out that dependent claims 2, 8 and 9 have been canceled without prejudice to or disclaimer of the subject matter contained therein. Therefore, the Examiner's rejection under 35 U.S.C. § 102 has been rendered moot with regard to these claims.

With regard to the merits of the Examiner's rejections, the Examiner bases his rejections on the Lobiondo patent, which discloses a print system having several different printers with different capabilities. A print server 60 with a scheduler 50 receives print jobs, analyses them in relation to printer capabilities necessary for processing the jobs, and checks which printers can do the job. The main difference between the system of the present invention is that the Lobiondo system is centrally controlled by the server/scheduler which "pushes" a job to the printer best suited for printing it, while in the present invention, printing is controlled by the connected printers themselves, "pulling" the job from central storage, upon local command from an operator.

Therefore, the user in the Lobiondo system has far less control, since the scheduler selects the printer, and only if that selected printer is not able to do the job, the scheduler enables the user to ask for another printer, which is then again selected by the scheduler. In the present invention, a user walks up to a(ny) printer and calls up the job, whereafter he may start printing that job locally. If the printer decides that it is not capable of printing the job, it warns the user, who may then either abandon the

printer and walk up to another one and try again there, or may change the settings of the job so that it can be printed at the current device after all.

In Lobiondo, three different methods are disclosed.

Method 1 (Column 4, last paragraph, and FIG. 4):

- user submits print job, including requested completion time and settings ("criteria") from the work station to a common spooling area;
- scheduler checks which printers are capable;
- scheduler checks availability of capable printers and selects printer (or possibly divides job over plural printers); and
- scheduler informs user of selected printer.

Method 2 (Column 5, first full paragraph):

- user submits job (with printer preselection) to common spooling area;
- scheduler checks print queue of preselected printer, and
- if small load in queue, allocate job to preselected printer and inform user if high load in queue, prompts user for either asking for another printer (→ scheduler selects a printer) or accepting preselected printer (and delay).

Method 3 (Column 6, lines 8-22):

- user calls up scheduler (may be done from a local printer operator unit);
- scheduler requests job settings ("criteria"), user enters them;
- user inputs job data to common spool area; and
- scheduler checks settings against the printer capabilities, and

- if a printer can do the job, the scheduler schedules the printer; and
- if no printer can do the job, the scheduler informs the user and lets him change the settings, after which the job is scheduled.

As may appear from the summaries above, the Lobiondo method is essentially a print job submission process. It unrolls at the moment the user submits his print job to the printer "system" and will typically be handled at the work station of the user. If the print job originates from a scanned process (that is, it is a copy process), the user interaction is done at the console of the combined scanner/printer.

In the present invention; however, the method is basically performed by the printer and not by a central server. The method of the present invention can be summarized as follows:

- user walks up to the printer and calls up list of received-and-waiting print jobs;
- printer checks every job against its own capabilities and shows list with possible warnings;
- user selects job from list and presses START key;
- if printer can print according to settings, it prints the job; and
- if printer cannot print job according to settings, it shows a warning on the display, together with advice as to what printer can do the job, and
- user may then change the settings and start the job or user may walk to the advice (or other) printer for printing.

Essentially, the print jobs are initiated at the printer console and are checked against printer capabilities by the printer itself. If the printer decides that it cannot process the job according to the associated job settings, it checks the capabilities of the other printers to find out if one of them can do the job and if so, advises the user through its display to walk up to that other printer and start the job there. The only central function of this system is the reception of print jobs and distribution of the job metadata to all connected printers.

Thus, in the present system, a user decides on what printer he wants to print his job, and actually walks up to that printer and starts the process there. If that printer cannot do the job, the user chooses another printer to do it.

In Lobiondo, the scheduler decides where the print job is printed, and the user is only informed of the decision of the scheduler. If the scheduler finds out that the printer of its choice is not available, it enables the user to ask the scheduler to make a new selection. In Lobiondo, printers do nothing else than printing their queues.

Although Lobiondo's method 3 may appear to the user as more or less similar, the user has to log onto the scheduler (possibly through a printer's operating unit) to get another printer (although he still cannot choose the printer himself), but the control process is quite different, as explained hereinabove.

With regard to the claims of the present invention, independent claims 1 and 7 are directed to the method of processing print files and independent claim 11 is directed to a printer for printing digital print files. Independent claim 1 recites a combination of

steps including “storing, in each digital image processing device, information on capabilities and status of connected digital image processing devices” and “locally initiating a digital image processing job through a local operating unit of a first image processing device.” In addition, the first image processing device performs the steps of “automatically analyzing said digital image processing job as to device capabilities necessary for processing said job in accordance with the job settings of the job” and “automatically checking if the first device can process the job in accordance with the job settings of the job.” Applicants respectfully submit that the Lobiondo reference relied on by the Examiner fails to teach or suggest the present invention as recited in independent claim 1.

As mentioned above, Lobiondo discloses a scheduler 50 within the centralized print server 60. In view of this, each digital image processing device, i.e. workstations 30 do not store information on capabilities and status of connected digital image processing devices as recited in independent claim 1 of the present invention. In addition, an image processing job cannot be locally initiated through a first image processing device, which then automatically analyzes the image processing job as to device capabilities and automatically checks if the first device can process the job as recited in independent claim 1.

With regard to independent claim 7 of the present invention, this claim is directed to a method of processing digital print files that includes “a memory for storing print files, each print file comprising metadata specifying job information including process

settings, and print image data.” Independent claim 7 recites a combination of steps including “receiving a print file from a remote location and storing the print file, while not automatically printing the print file,” “actively sharing at least the metadata of each received print file among said plurality of printers connected to the system” and “each of said plurality of printers making each print file available for selection and printing, through respective local operating units of said plurality of printers.” In addition to the above comments with regard to independent claim 1, Applicants submit that independent claim 7 further defines over the Lobiondo reference relied on by the Examiner since the print files in Lobiondo are automatically printed when a particular print file is received from a remote location. In addition, there is no indication in Lobiondo that each of the plurality of printers make each print file available for selection and printing as recited in independent claim 7. In view of this, the Lobiondo reference fails to anticipate independent claim 7 of the present invention.

With regard to independent claim 11, this claim is directed to a printer for printing digital print files. Independent claim 11 recites a combination of elements including “a maintaining mechanism for maintaining information on capabilities and status of connected printers.” As mentioned above with regard to independent claim 1, the scheduler 50 of Lobiondo is located within the print server and therefore Lobiondo fails to disclose a printer for printing digital print files that includes a maintaining mechanism for maintaining information on capabilities and status of connected printers as recited in independent claim 11. It should be noted that independent claim 11 is directed to the

printer as including each one of the elements recited therein and not the network printing system itself as disclosed in the Lobiondo reference.

With regard to independent claims 10 and 18, the Examiner recognizes that the Lobiondo reference fails to disclose processing digital scan jobs in a network system including a plurality of scanners as recited in these claims. However, the Examiner has relied on the Ohkubo reference in order to modify Lobiondo to arrive at the presently claimed invention. However, Ohkubo discloses a system including an image processor and a plurality of scanners with different capabilities, mainly with respect to process control. When a scan process is initiated, the image processor first determines what kind of scanner is doing the job, where upon it adapts its communication with that scanner to the capabilities thereof.

Ohkubo does not disclose a central image processor selecting a scanner on the basis of required scanned process settings. In addition, Ohkubo fails to disclose scanners doing the assessment themselves. Therefore, the combination of Lobiondo and Ohkubo is not obvious as asserted by the Examiner.

With regard to the Examiner's reliance on the MacKay reference, this reference has only been relied on for selecting print files based on metadata. The MacKay reference is also silent with regard to a printer having a maintaining mechanism for maintaining information on capabilities and status of connected printers as recited in independent claim 11. Therefore, the MacKay reference fails to make up for the deficiencies of Lobiondo.

With regard to dependent claims 3-6, 12-17, 19 and 20, Applicants respectfully submit that these claims are allowable due to their respective dependence upon independent claims 1, 11 and 18, as well as due to the additional recitations in these claims.

In view of the above amendments and remarks, Applicants respectfully submit that claims 1, 3-7 and 10-20 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's rejections under 35 U.S.C. §§ 102 and 103 are respectfully requested.

CONCLUSION

For the foregoing reasons and in view of the above clarifying amendments, Applicants respectfully request the Examiner to reconsider and withdraw all of the objections and rejections of record, and earnestly solicit an early issuance of a Notice of Allowance.


Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Paul C. Lewis (Registration No. 43,368) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No.

02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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